

IN THE SPECIFICATION

1. Please amend paragraphs [0038]-[0041] as follows:

[0038] ~~FIG. 1 is a block diagram showing a network configuration of a high-speed wireless data system for using either a public network or a private network, in accordance with the principles of the present invention.~~ FIG. 1 is a block diagram showing a network configuration of a high-speed wireless data system according to one embodiment of the present invention, for using either a public network or a private network. The network configuration, function, and operation of the high-speed wireless data system according to the present invention will be described in detail with reference to FIG. 1. It should be noted that an access network transfer system (*i.e.*, an “ANTS”) has a function block that is similar to a BTS in an 1x EV-DO system. In FIG. 1, nodes which are used in a private wireless network only or in both a private wireless network and a public wireless network are represented by lower case letter “p” as a prefix before the corresponding reference symbol or label.

[0039] The high-speed wireless data terminals 11 and 21 as shown in FIG. 1 are terminals which are used in general high-speed wireless data systems. The terminals 11 and 21 can be referred to as access nodes (AN) or access terminals (AT). It is assumed that one terminal 11 is a subscriber receiving both private and public wireless network services and the other terminal 21 is a subscriber receiving public wireless network services. The base stations pANTS, a private access network transfer system 101, and pANTS 102 shown in FIG. 1 have predetermined wireless service areas 10 and 20,

respectively. When a terminal enters a wireless service area, each of the base stations 101 and 102 sets a session and performs an operation necessary to assign ~~an Unicast Access Terminal Identifier~~, ~~an~~ a Unicast Access Terminal Identifier (*i.e.*, ~~[[an]]~~ a “UATI”) required for the terminal. ~~The an Unicast Access Terminal Identifier is a unicast access terminal identifier (UATI).~~ The ~~[[PANTS]]~~ pANTS performs a function similar to a BTS in a general mobile communication system, but does not assign ~~an Unicast Access Terminal Identifier (*i.e.*, the “UATI”)~~ a UATI to a terminal. Typically, only a data location register (*i.e.*, the “DLR”) assigns the UATI to a terminal, and then transmits the assigned UATI to a base station where a mobile terminal is located. At this time, the base station usually performs only an operation for transferring the UATI to the mobile terminal on a radio line. When a call is terminated at or originated from a terminal, each of the base stations performs a necessary operation accordingly. The base stations 101 and 102 are connected to a hub 110.

[0040] The hub 110 is connected to other nodes in the private wireless network and to each node in the public wireless network or another hub connected to other nodes in the public wireless network. FIG. 1 shows that the hub 110 is connected to another hub 120 which enables the hub 110 to be connected ~~to the~~ outside of the private wireless network. The hub 110 connected to each node of the private wireless network discriminates between services for a terminal or private packet data service node (pPDSN) 111 in the private wireless network and services for ~~[[the]]~~ outside of the private wireless network when it performs routing in response to a call from a terminal within the private wireless

network. In other words, a call to the inside of the private wireless network is connected to a private base station controller (pANC) 112 within the private network, while a call to the public wireless network is connected to the hub 120. An access network controller (*i.e.*, an “ANC”) has a function block that is similar to a BSC in an 1x EV-DO system. The hub 110 has predetermined server addresses utilized in determining whether or not a call is originated to the inside of the private wireless network ~~or not~~. When there is a call to a server or ~~an Unicast Access Terminal Identifier~~ a UATI terminal having the server, which has ~~an Unicast Access Terminal Identifier~~ a UATI information containing a server address belonging to the predetermined server addresses in the hub 110, the call is detected as a call to the inside of the private wireless network.

[0041] For example, a ~~an Unicast Access Terminal Identifier~~ a UATI is assigned by a data location register (DLR) 121 to a private wireless network subscriber to have a predetermined server address. If predetermined server addresses are “samsung.co.kr,” “samsung.com,” etc., a terminal of the private wireless network may have an address such as “111@samsung.co.kr.” If the terminal of the private wireless network requests to access one of the predetermined server addresses or originates a call to a terminal having one of the predetermined server addresses, such as the address “aaa@samsung.com,” for example, the call from the terminal is detected as a call to the inside of the private wireless network. When none of the predetermined server addresses are contained in the ~~Unicast Access Terminal Identifier~~ UATIs of the terminal originating the call and of the terminal or server at which the call is requested to be terminated, the call is detected as a

call to the public wireless network. In contrast, a call from a server may be determined to be a call to the private wireless network even when ~~an Unicast Access Terminal Identifier~~ a UATI of only the server has a predetermined server address.

2. Please amend paragraph [0043] as follows:

[0043] The base station controller (pANC) 112 controls assignment of session and setting of ~~unicast access terminal identifier (UATI)~~ a UATI for a terminal and authentication of the terminal by means of the system 113. [[More]] A more detailed description about this control operation will be given below.

3. Please amend paragraph [0047] as follows:

[0047] The data location register (DLR) 121 may further store information about terminals in the private wireless network according to the present invention. In this case, the information stored in the data location register (DLR) 121 may be classified into first information when the terminal operates only in the private wireless network and second information when the terminal operates in either the private wireless network or the public wireless network. The description below will be given under the presumption that the terminal operates in either the private wireless network or the public wireless network. In this case, the data location register (DLR) 121 stores not only the same information for the private wireless network as the information required for the public wireless network, but also inherent information about the private wireless network. The

inherent information of the private wireless network should include service time, types of services, and service area such as servicing base station or sector, etc. Moreover, the data location register (DLR) 121 may assign ~~an Unicast Access Terminal Identifier~~ a UATI to each terminal with a special engagement, where that “special engagement” is arbitrarily set according to a service that is to be provided by another business, such as a service provider. The special engagement can require that a private wireless network terminal be near a predetermined base station in a predetermined time zone, for example.

4. Please amend paragraph [0049] as follows:

[0049] The base stations 101 and 102, the base station controllers pANC 112 and ANC 123, the data location register (DLR) 121, and the packet data serving nodes pPDSN 111 and PDSN 124 may be constructed on the basis of Internet protocol (IP) to reduce the price of the system, because asynchronous transfer mode (ATM) -based connections usually employed between the base stations and the base station controllers can increase the price of the system. When the base stations 101 and 102, the base station controllers 112 and ANC 123, the data location register (DLR) 121, and the packet data serving nodes pPDSN 111 and PDSN 124 are constructed on the basis of Internet protocol (IP) as described above, interprocessor communication (IPC) can be carried out between internal boards or processors. Further, an Internet protocol (IP) address is assigned to an internal processor or board of each node. Further, an internal Internet protocol (IP) address may be assigned to each node located within a station house such as a house of a central office

or a control station while a fixed Internet protocol (IP) address is assigned to each node located far from the station house, so as to prevent a lack of an Internet protocol (IP) address.

5. Please amend paragraphs [0052]-[0053] as follows:

[0052] A control unit 211 controls general operation of the base station controller 112. For example, the control unit 211 sets and updates sessions for authentication of terminals and performs control for assignment of ~~Unicast Access Terminal Identifiers~~ UATIs, traffic control according to call setting, and various signaling control. A signal processor 212 performs various signaling processes required in the base station controller 112. For example, the signal processor 212 delivers a paging signal to a terminal or controls operations in relation to assignment of ~~an Unicast Access Terminal Identifier~~ a UATI, storage of location information, and assignment and updating of session information to the data location register (DLR) 121. A protocol processor 213 processes protocols required in communication between the terminal 11 and the public packet data serving node (PDSN) 124 or private packet data serving node (pPDSN) 111, according to the control by the control unit 211.

[0053] A traffic processor 214 processes traffic transferred from the packet data serving nodes pPDSN 111 and PDSN 124 to the terminal 11, from the terminal 11 to the packet data serving nodes pPDSN 111 and PDSN 124, or from the terminal 11 to the other

terminal 21, according to the control by the control unit 211. A memory 215 stores program data for the general operation of the base station controller 112, ~~Unicast Access~~ ~~Terminal Identifiers~~ UATIs and session information of terminals located within the area of the base station controller 112, and control data and traffic data to be temporarily stored during communication. The base station controller 112 includes multiple sheets of boards.